Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	**)**	
Amendment of Part 97 of the Commission's Rules	**)**	**RM-11828**
Governing the Amateur Radio Service Rules	**)**	
Concerning Permitted Emissions and Operating	**)**	
Privileges for Technician Class Licensees	**)**	

To: The Commission

REPLY COMMENTS TO ARRL, MAY 1, 2019

Janis Carson, amateur radio service licensee AB2RA since 1959, and ARRL member for over 40 years, pursuant to Section 1.405 of the Commission's Rules (47 C.F.R. §1.405), hereby respectfully requests to reply to comments filed by the petitioner and posted April 30, 2019. Please note that the ARRL only has about 20% of the total US amateurs as membership, and their membership may include non US amateurs. The ONLY representation people like me get is at the FCC during comments.
Reference ID: 10430651927593
https://ecfsapi.fcc.gov/file/10430651927593/ARRL%20Reply%20FCC%20RM-11828%2004_2019.pdf

1. Petitioner states "The Entry Level Technician Class License Needs Updating in Today's Digital World. It has been more than a decade since the privileges of the amateur radio entry level license have been evaluated. The rule changes requested by the ARRL in its petition are modest.....Updating the Technician class privileges is the sole subject and intent of the ARRL petition."

In my previous comments, I included a graph that demonstrated that growth in overall licenses and Extra Class upgrades is steadily upward. The FCC addressed all these issues previously in RM-10867; Previous 2004 Docket 98-143, and no basis has been provided by ARRL to revisit that.

https://ecfsapi.fcc.gov/file/10314271330556/petition%20to%20dismiss%20RM-11828.pdf

https://ecfsapi.fcc.gov/file/10319809215972/RM-11828%20errata.pdf

2. The changes are not modest. The VOICE privileges offered to Tech by this proposal are 50% of the General assignment on the bands included. 40 meter VOICE has been problematic due to foreign broadcast and other crowding factors, exacerbated by the low sunspots. 40 meter DATA is even more

difficult, since IARU Regions 1 & 3 allow VOICE in the USA DATA segment. Frequently, those VOICE operations in the USA DATA segment are true emergency communications. The potential interference added to the 40 meter DATA segment for questionable amateur population gains does not seem to justify a cost/benefit analysis. Furthermore, RM-11828 and RM-11759 would allow a Technician class license an instant upgrade which permits them to become the control operator of an HF email store and forward Automatic Data (ACDS) relay station. The existing Tech or new Tech could do so without completing an exam on even the basic USER knowledge for such a system, let alone the skills necessary to OPERATE such a system. This is particularly troublesome on 40 meters. For those reasons, some have opposed the radical nature of this proposal. (The exam questions mentioned are included at the end, in the appendix.)

3. ARRL states: "Updating the Technician class privileges is the sole subject and intent of the ARRL petition." This petition resulting in RM-11828 is a suite of ARRL petitions related to digital modes. The rule making often cross filed is RM-11759. The features of RM-11759 show that the expansion of the 80 meter DATA band very much IS linked with Technician privileges. ARRL knows this is very much related, and references 11759 in a footnote on page 22 of their petition for 11828:

"ARRL filed on January 8, 2016 a Petition for Rule Making (RM-11759) that, if granted, would affect the RTTY/data and telephony subbands in the 80- and 75-meter allocations. The instant Petition appendix does not presume prior Commission action on RM-11759. However, the instant Petition does not serve as a substitute for, nor does it supersede RM-11759."

I stated that problem clearly in my petition to dismiss RM-11828: "6. The Tech license does not cover General Question Pool G2E02(B), G2E03(D), G2E07(A), G2E09(C), G2E10(D), G2E12 (C), G8C06 (B), G8C07 (B), G8C01(B), G1E05(C), G1E11(C), G1E12(A), G1E13(D), which cover essential modern HF digital communications procedures. Without that basic knowledge, interference, improper operation and spectrum sharing, and enforcement problems will result. ARRL in its petition for RM-11828 explicitly dismisses the need for complete revision of the existing Tech Question Pool to include

that essential syllabus before granting that access. ALL EXISTING Tech licensees and any new ones should be required to pass a new test until such time as they can demonstrate competency." They should take the General class examination, which DOES contain the necessary information.

https://ecfsapi.fcc.gov/file/10314271330556/petition%20to%20dismiss%20RM-11828.pdf

4. In the April 30, 2019 reply comments, ARRL states: "There are a number of comments that address subjects in other open proceedings, rather than the Technician class privileges that are the subject of this proceeding. In particular, we note that a number of comments are cross-filed in proceedings such as WT Docket No. 16-239, RM-11708, RM-11759, and RM-11831, and that these comments focus on subjects under consideration in those proceedings rather than the subject of this proceeding. Those filings should be considered in the proceedings that they address, rather than here. The ARRL petition in this proceeding addresses only Technician class privileges." ARRL cites no FCC procedural rule that prohibits cross filing in multiple related matters. It saves duplication, and consolidates related information, decreasing the work load of the FCC.

5. ARRL further states: "Whatever the outcome, this subject does not affect Technician class licensees any differently than all other amateur licensees and should not delay initiation of a proceeding to consider updating Technician class privileges. Given the pendency of those issues in WT Docket 16-239, we would expect that resolution of such issues in that proceeding will be well before final consideration of Technician class privileges as proposed by the ARRL in this proceeding.....In the meantime, this is no justification for holding up unrelated proceedings such as this. Such rules apply to all radio amateurs operating under Part 97, including Technician class licensees now and in the future."

As ARRL notes, 16-239, RM-11708, RM-11759, RM-11831 (and unfortunately even 17-344) affects ALL CLASSES of licenses, including Technician, and are therefore relevant to RM-11828. That is why many of us cross filed, to indicate the consequences of ruling in those proceedings in concert with an enactment of RM-11828.

6. While all of would probably welcome a speedy resolution to pending 16-239, RM-11708, RM-11759, RM-11831, the FCC has in the past summarized multiple amateur petitions into an Omnibus Rule making. In the interest of efficiency, this should also include RM-11785, RM-11767, along with multiple "Vanity Call Sign" matters too many to recall.

7. The ARRL further states in its reply comment: "The ARRL stated in a recent filing in WT Docket No. 16-239 that it is in the process of facilitating discussion of differences expressed in comments filed in several proceedings on the requirements in the Commission's Part 97 Rules, and will report to the Commission thereon. In the meantime, this is no justification for holding up unrelated proceedings such as this. Such rules apply to all radio amateurs operating under Part 97, including Technician class licensees now and in the future." This is in reference to a delay requested in this ex parte: https://ecfsapi.fcc.gov/file/1032717663093/ARRL%20Ltr%202%20FCC%2016-239%2003_27_2019.pdf

A number of us have made earnest efforts to arrange a meeting with ARRL as early as just two weeks from now. ARRL has countered with multiple scheduling problems. Most of us are regular citizens, with medical issues that limit our travel. **ARRL is compensated for travel expenses; we are not.** There has been no accommodation, to facilitate a meeting at Dayton convention, when most of the principals will be there. I find it incredulous that an hour or two is impossible to find, in spite of our flexibility, given the consequences of failure. Some good people inside ARRL have tried to make the meeting happen, but the supporters of 16-239 and RM-11828 have prevented it.

The effort has failed to find "common ground" such as regulating "by band segment" instead of "by band width" as ARRL has insisted, in spite of the FCC instructions for 16-239 allowing both choices. I reference this solution using ARRL's own band plan in a previous filing, https://ecfsapi.fcc.gov/file/121455888341/DRAFT%20REPLY%20ARSFI%2012_18%20%2016-239.pdf

Note well the discussion titled "How to implement the by band segment option" and its charts, copied

from the very ARRL draft band plan that began RM-11708 and all the rest of these interlocked rule makings, 16-239, RM-11759 (with its Tech upgrade), and RM-11828. The ARRL admits voluntary plans will not work. The ARRL will be in the awkward position of arguing against its own proposal, if it objects to this solution. **The FCC should adopt "by band segment" Part 97 regulation along the lines of the included ARRL band plan charts. That is my "common ground" recommendation,** which will never be heard by the ARRL. The FCC should not wait for the 90 day period ARRL requested. **There is no further reason to grant an extension. The FCC should act immediately on 16-239, RM-11759, RM-11828, RM-11785, RM-11767 and the "Vanity Call Signs" in an Omnibus Report and Order.**

CONCLUSION

For the reasons stated above, I respectfully request that the Commission issue its Omnibus Rule Making Report and Order at its earliest opportunity for the purpose of resolving all these issues which have been open for over 5 years.

Please either reject 16-239 or modify it as described above for "by band segment" rather than "by band width".

Only if the FCC decides to do "by band segment" please adopt the 80 meter frequency provisions of RM-11759 but without the proposed Tech license modifications.

Please adopt RM-11785 and RM-11767 as wide support is evident in comments, and they are prudent measures to improve the amateur service, as an Omnibus Report and Order.

Please reject RM-11828 in its entirety for good cause, as noted in my previous comments.

Please reject the ARRL request to delay 16-239. There will be no meeting or "common ground".

Please reject the ARRL's unjustified effort to disenfranchise the commenters who oppose RM-11828, often in multiple cross filings, for good cause.

Respectfully submitted,
/S/
Janis Carson, AB2RA

APPENDIX: TECH QUESTION POOL DOES NOT INCLUDE THESE GENERAL QUESTIONS; ARRL CLAIMS THEY ARE NOT NECESSARY.

G2E02 (B) How can a PACTOR modem or controller be used to determine if the channel is in use by other PACTOR stations?
Unplug the data connector temporarily and see if the channel-busy indication is turned off
Put the modem or controller in a mode which allows monitoring communications without a connection
Transmit UI packets several times and wait to see if there is a response from another PACTOR station
Send the message: "Is this frequency in use?"
COMMENT: This procedure is already being ignored by operators who have passed a General exam.

G2E03 (D) What symptoms may result from other signals interfering with a PACTOR or WINMOR transmission?
Frequent retries or timeouts
Long pauses in message transmission
Failure to establish a connection between stations
All of these choices are correct
COMMENT: This can be the result of automatic control of outgoing mail, or ignorantly retrying to send email to a Winlink RMS that is already busy with other traffic, maybe even emergency traffic. Also, it can be the result of attempting a Winlink email on a frequency already in use by a station employing a different mode than Pactor.
G2E07 (A) What segment of the 80-meter band is most commonly used for digital transmissions?
3570 - 3600 kHz
3500 - 3525 kHz
3700 - 3750 kHz
3775 - 3825 kHz
COMMENT: Remember that WT 16-239 and RM-11708 NOW will permit data emissions of unlimited band width ANYWHERE in the CW/DATA segment, not just the specified 97.221 (B) spectrum.

G2E09 (C) How do you join a contact between two stations using the PACTOR protocol?
Send broadcast packets containing your call sign while in MONITOR mode
Transmit a steady carrier until the PACTOR protocol times out and disconnects
Joining an existing contact is not possible, PACTOR connections are limited to two stations
Send a NAK response continuously so that the sending station has to pause
HINT: Joining an existing contact is not possible, PACTOR connections are limited to two stations. Which is why it is useless to try to tell a Pactor operator the frequency is in use.

G2E10 (D) Which of the following is a way to establish contact with a digital messaging system gateway station?
Send an email to the system control operator
Send QRL in Morse code
Respond when the station broadcasts its SSID
Transmit a connect message on the station's published frequency
COMMENT: Transmit a connect message on the station's published frequency - this answer does NOT include, check if the RMS gateway is already busy, or if a station using a different emission mode is on the channel. But that is pretty much now it works now anyway. When WT 16-239 and RM-11708 are enacted, this sort of thing will be common anywhere in the existing CW/DATA segment. By the way, the published frequency is found in Winlink's software updater. "97.101 General standards.(b) Each station licensee and each control operator must cooperate in selecting transmitting channels and in making the most effective use of the amateur service frequencies. No frequency will be assigned for the exclusive use of any station." The alleged "cooperation" in frequency sharing is the RMS control operator chooses a frequency, Winlink publishes it, and YOU get OFF "THEIR" frequency NOW. Steve Waterman, in his PSHSB 17-344 comments, wants to install 100 of these ACDS stations on 40 meters, currently at 2.4 KHz each. ARRL and Waterman will do the same on 20 meters and the other HF bands too. The current FCC 16-239 implementation permits ANY bandwidth, in excess of 2.4 KHz. HINT: What band width will Pactor 5 use? Whatever it needs to run email even faster!

G2E12 (C) Which of the following describes a waterfall display?
Frequency is horizontal, signal strength is vertical, time is intensity
Frequency is vertical, signal strength is intensity, time is horizontal
Frequency is horizontal, signal strength is intensity, time is vertical
Frequency is vertical, signal strength is horizontal, time is intensity
COMMENT: Some of the Pactor modems do not have a waterfall display, and often the "channel busy" detectors are deliberately turned OFF. Randal Evans does it this way: "Even when I am topside crusing (sic) the system runs automatically below deck publishing my position reports and downloading my email."

G8C06 (B) What action results from a failure to exchange information due to excessive transmission attempts when using PACTOR or WINMOR?
The checksum overflows
The connection is dropped
Packets will be routed incorrectly
Encoding reverts to the default character set

G8C07 (B) How does the receiving station respond to an ARQ data mode packet containing errors?
It terminates the contact
It requests the packet be retransmitted
It sends the packet back to the transmitting station

It requests a change in transmitting protocol

G8C01 (B) Which of the following digital modes is designed to operate at extremely low signal strength on the HF bands?
FSK441 and Hellschreiber
JT9 and JT65
Clover
RTTY

G1E05 (C) [97.115(a)(2),97.117] What types of messages for a third party in another country may be transmitted by an amateur station?
Any message, as long as the amateur operator is not paid
Only messages for other licensed amateurs
Only messages relating to Amateur Radio or remarks of a personal character, or messages relating to emergencies or disaster relief
Any messages, as long as the text of the message is recorded in the station log
COMMENT: D maybe, if its saved in the outgoing mail folder on Winlink? There is no method to monitor this kind of traffic live off the air. This makes no mention that there are countries that do not permit ANY kind of third party traffic, regardless of content.

That is why there is a petition that requires immediately issuing a rule making number.
https://ecfsapi.fcc.gov/file/100918881206/PETITION%20FOR%20RULEMAKING.pdf

Randal Evans does it this way: "Its a great service because all of the other available Internet services cost money. Even when I am topside crusing (sic) the system runs automatically below deck publishing my position reports and downloading my email. I use the system for sending position reports, ordering supplies, repairs, chatting with friends and posting to facebook. RM-11708 will allow Winlink eMail to run twice as fast. That is great and I am for that. Some of the technical folks are saying that if RM-11708 is published with no bandwidth we can get even faster Internet and might be able to stream movies on the Winlink Internet. I'm for passing RM-11708 into law with no bandwdith limits." With no way to monitor the content or even the call signs or sources of the third party traffic, do you think this thing has gotten out of hand?

The ARRL thinks the NEW TECHNICIAN ENHANCED LICENSEES DON'T NEED TO KNOW THIS EITHER!

G1E11 (C) [97.221] Which of the following is the FCC term for an unattended digital station that transfers messages to and from the Internet?
Locally controlled station
Robotically controlled station
Automatically controlled digital station
Fail-safe digital station

G1E12 (A) [97.115] Under what circumstances are messages that are sent via digital modes exempt from Part 97 third party rules that apply to other modes of communication?
Under no circumstances
When messages are encrypted
When messages are not encrypted
When under automatic control

G1E13 (D) [97.221, 97.305] On what bands may automatically controlled stations transmitting RTTY or data emissions communicate with other automatically controlled digital stations?
On any band segment where digital operation is permitted
Anywhere in the non-phone segments of the 10-meter or shorter wavelength bands
Only in the non-phone Extra Class segments of the bands
Anywhere in the 1.25-meter or shorter wavelength bands, and in specified segments of the 80-meter through 2-meter bands

So, do you think these questions should be required of anyone using HF spectrum for email, to maintain a minimum competency of operators? Or should we give a "free upgrade" to any existing Technician licenses? Or should a marina run "Tech License in a Weekend" classes, and send them to Farallon Electronics for their radio installation? Is "free messaging service" listed in Part 97.1 as a purpose of amateur radio? Or, the new techs are set up with the gear to be the CONTROL OPERATOR OF A NEW WINLINK HF EMAIL SHORE STATION?

"FCC Part 97.1 Basis and purpose.
The rules and regulations in this part are designed to provide an amateur radio service having a fundamental purpose as expressed in the following principles:
(a) Recognition and enhancement of the value of the amateur service to the public as a voluntary noncommercial communication service, particularly with respect to providing emergency communications.
(b) Continuation and extension of the amateur's proven ability to contribute to the advancement of the radio art.
(c) Encouragement and improvement of the amateur service through rules which provide for advancing skills in both the communication and technical phases of the art.
(d) Expansion of the existing reservoir within the amateur radio service of trained operators, technicians, and electronics experts.
(e) Continuation and extension of the amateur's unique ability to enhance international goodwill."

CONCLUSION: Randal Evans will likely not fit the definition of a "trained operator" with "advancing skills" qualified to "contribute to the advancement of the radio art." That is NOT his fault. He just wants to cruise his yacht and have effective email while off shore. He doesn't care anything about radio; it is just an appliance on his boat, like a fresh water system. It is the fault of the false advertising, and misuse of the amateur service as

promoted by the ARRL and Winlink advocates. "Free HF email for all" is not mentioned in Part 97.1. The use of Winlink for these communications is misepresented as "providing emergency communications". In fact, it is just a violation of "Part 97.113 Prohibited transmissions.(5) Communications, on a regular basis, which could reasonably be furnished alternatively through other radio services." We do not need even more of this activity on the HF bands. Recognize it for what it is. It reduces amateur radio to an "AP" by dumbing down the HF spectrum entry standards. Reject RM-11828, RM-11708, WT 16-239, RM-11759, and the new ARRL Petition for expansion of Technician HF privileges as part of a package of petitions that will ruin the amateur service beyond repair.

Direct them to come up with an appropriate new plan.